

What is claimed is:

1. A method, comprising:

providing test input data elements and corresponding test output data elements,

providing the test input data elements to a data classifier to generate result output data elements,

generating measures of difference based on differences between each test output data element and each corresponding result output data element,

based on the measures of difference, generating a performance measure of the data classifier.

2. The method of claim 1, wherein generating a performance measure includes:

providing categories associated with different values of measures of difference, and

associating the measures of difference with the categories based on the respective values of the measures of difference.

3. The method of claim 2, wherein generating a performance measure further includes:

associating the categories with weights,

for each category, generating a product based on the weight and the number of measures of difference associated with the category, and

generating a sum of the products.

4. The method of claim 3, wherein associating includes:

associating the categories with weights based on the values of measures of difference associated with the categories.

5. The method of claim 3, wherein associating includes:

associating categories having larger values of measures of difference with greater weights than categories having smaller values of measures of difference.

6. The method of claim 3, wherein generating a performance measure further includes:
normalizing the sum of the products.

7. The method of claim 6, wherein normalizing includes:
normalizing the sum of the products based on one of: the number of test input data elements and a reciprocal of a logarithm of the number of test input data elements.

8. The method of claim 1, further comprising:
training the data classifier, and
based on comparing the performance measure with a threshold, retraining the data classifier.

9. The method of claim 1, wherein the test data are based on telecommunications data.

10. The method of claim 1, wherein the data classifier includes a neural network.

11. A system for operating a data classifier, the system comprising:
test data including test input data elements and corresponding test output data elements,
and
a processor capable of:

receiving result output data elements generated by the data classifier based on the test input data elements,

generating measures of difference based on differences between each test output data element and each corresponding result output data element, and,

based on the measures of difference, generating a performance measure of the data classifier.

12. The system of claim 11, wherein the processor is capable of:

based on the values of the measures of difference, associating the measures of difference with categories.

13. The system of claim 11, wherein the processor is capable of:

associating the categories with weights,

for each category, generating a product based on the weight and the number of measures of difference associated with the category, and

generating a sum of the products.

14. The system of claim 13, wherein the processor is capable of:

normalizing the sum of the products based on one of: the number of test input data elements and a reciprocal of a logarithm of the number of test input data elements.

15. The system of claim 11, wherein the processor is capable of:

training the data classifier, and

based on comparing the performance measure with a threshold, retraining the data classifier.

16. The system of claim 11, wherein the test data are based on telecommunications data.

17. A processor program for operating a data classifier, the processor program disposed on a processor-readable medium and comprising instructions to cause a processor to:

receive test data including test input data elements and corresponding test output data elements,

receive result output data elements generated by the data classifier based on the test input data elements,

generate measures of difference based on differences between each test output data element and each corresponding result output data element, and,

based on the measures of difference, generate a performance measure of the data classifier.

18. The processor program of claim 17, wherein the instructions to generate a performance measure include instructions to:

based on the values of the measures of difference, associate the measures of difference with categories.

19. The processor program of claim 18, wherein the instructions to generate a performance measure further include instructions to:

associate the categories with weights,

for each category, generate a product based on the weight and the number of measures of difference associated with the category, and

generate a sum of the products.

20. The processor program of claim 19, wherein the instructions to generate a performance measure further include instructions to:

normalize the sum of the products based on one of: the number of test input data elements and a reciprocal of a logarithm of the number of test input data elements.

21. The processor program of claim 17, further comprising instructions to:

train the data classifier, and

based on comparing the performance measure with a threshold, retrain the data classifier.

22. The processor program of claim 17, wherein the test data are based on telecommunications data.